WATER & CLIMATE CHANGE

Potential Changes

San Diego County currently imports up to 95% of its water hundreds of miles from the California and Colorado River aqueducts.

- Wetter wet years & drier dry years
- 20% or more reduction in imported water sources
- Overall 18% shortfall in water supply by 2050

How can Chula Vista be affected?

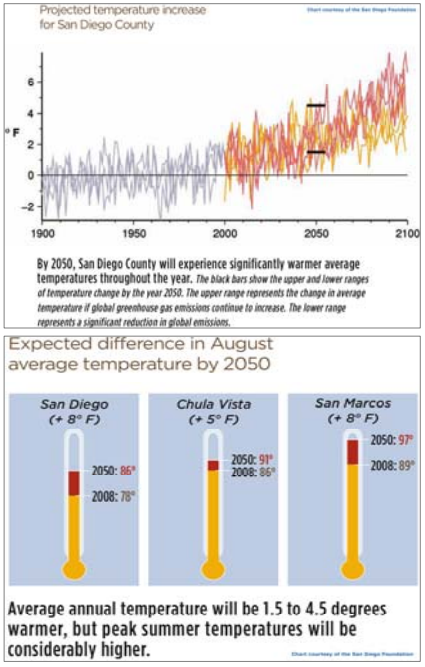
- Longer & more intense droughts
- Lower groundwater supplies for private wells
- Need for more <u>local</u> water supplies
- Increased cost for water
- More concentrated pollution in runoff
- Higher flooding risk

How can Chula Vista prepare?


- Improve efficiency thru new codes & retrofit programs
- Monitor groundwater supplies & protect recharge areas
- Promote & expand graywater/recycled water availability
- Update City stormwater management plans

ENERGY & CLIMATE CHANGE

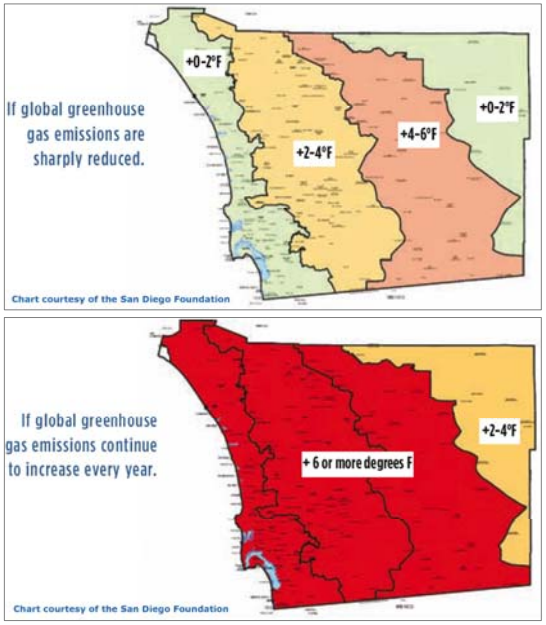
Potential Changes



- 1.5 – 4.5 °F warmer on average
- Heat waves more frequent, longer, & intense
- Less imported energy supply from hydropower

How can Chula Vista be affected?

- Higher peak demand for energy
- More intense “Urban Heat Island Effect”
- Higher energy costs
- Need for more <u>local</u> energy supplies

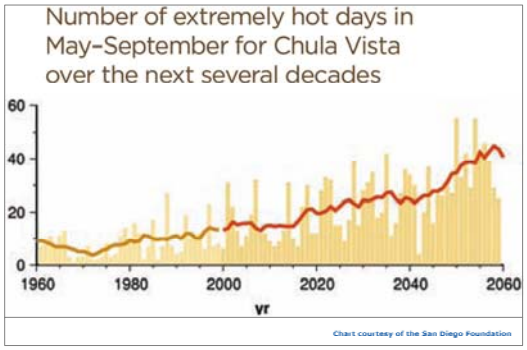


How can Chula Vista prepare?

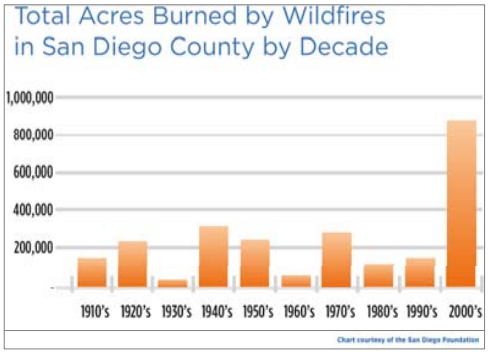
- Improve efficiency thru new codes & retrofit programs
- Install solar PV to help meet peak demand
- Expand the City’s urban forest
- Integrate “cool” paving & roofing into City projects

PUBLIC HEALTH/WILDFIRES & CLIMATE CHANGE

Potential Changes



- Severe heat waves
- Reduced air quality
- Increased exposure to vector-borne diseases



- More intense & frequent wildfires

How can Chula Vista be affected?

- More heat-related illness among residents
- More respiratory illness among residents
- More incidents of West Nile virus & Hantavirus

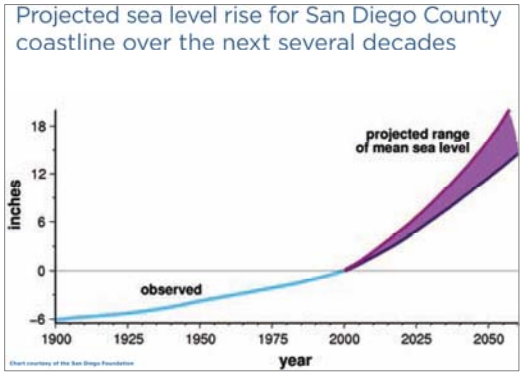
- More property damage & potential loss of human life

How can Chula Vista prepare?

- Update Public Health element in General Plan
- Expand number of “Cool Zones”
- Education & outreach to vulnerable residents
- Require pools/ponds to be drained at unoccupied properties
- Update City’s Hazard Mitigation Plan for higher wildfire risks
- Revise building codes for wildfire-prone areas

COASTAL INFRASTRUCTURE & CLIMATE CHANGE

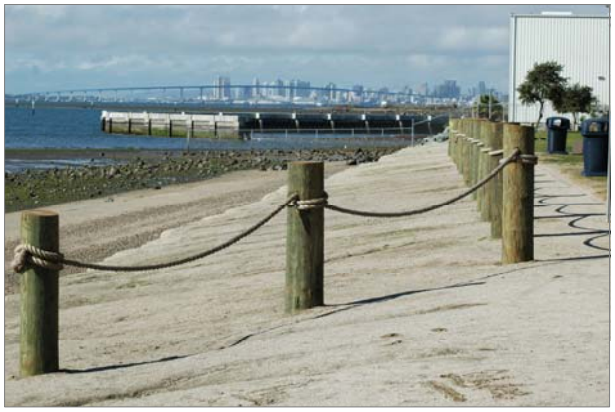
Potential Changes



- Sea level rise between 12-18 inches by 2050
- Increased coastal flooding & inundation
- Increased erosion

How can Chula Vista be affected?

- Private property damage from flooding & inundation
- City infrastructure (ex. roads & pump stations) loss along coast
- Reduced recreational opportunities or public access along coast



How can Chula Vista prepare?

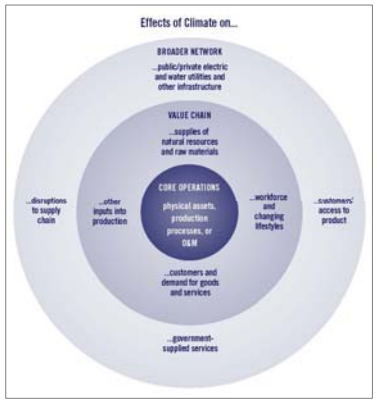
- Incorporate sea level rise risks into new project design & construction
- Educate coastal property-owners about increased risk
- Ensure public access is maintained if sea level rises
- Coordinate with Port of San Diego on further studies

LOCAL ECONOMY & CLIMATE CHANGE

Potential Changes

- Sea level rise along coast
- More intense & frequent wildfires
- Prolonged drought periods
- Severe heat waves
- Increased exposure to vector-borne diseases & poor air quality

How can Chula Vista be affected?



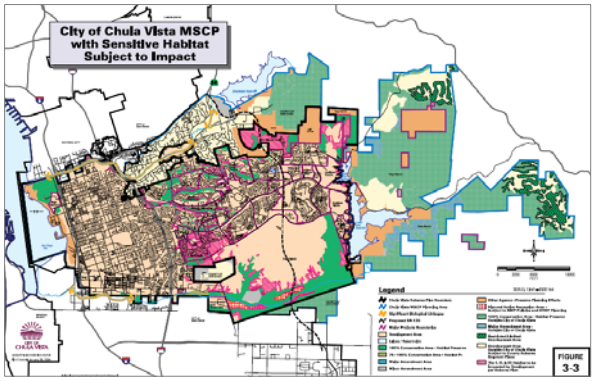
- Vulnerability to certain sensitive industries
- Energy & water supply shortages
- Increased pressure on business supply chains
- Higher insurance rates due to flooding & wildfires
- Greater health care & utility costs

How can Chula Vista prepare?

- Assist businesses in developing climate strategies
- Improve efficiency thru new codes & retrofit programs
- Develop alternative & local supply markets
- Workforce retraining
- Engage businesses in hazard planning

BIODIVERSITY & CLIMATE CHANGE

Potential Changes



- Shifts to habitats due to new climate patterns
- Altered stream flow with changing precipitation
- Sea level rise along coast
- Salt water intrusion into freshwater systems
- More intense & frequent wildfires

How can Chula Vista be affected?

- Sensitive species can't relocate to new areas
- Riparian species can't survive new water & sediment flow patterns
- Wetland areas permanently inundated
- Lower freshwater supplies for plants & wildlife
- Increased risk from invasive species

How can Chula Vista prepare?

- Monitor abundance & distribution of species
- Actively restore habitats to improve climate resilience
- Incorporate sea level rise into coastal planning
- Protect groundwater recharge areas
- Balance preservation & fire management